DOCUMENT RESUME

ED 455 926 PS 029 670

AUTHOR	Bielick, Stacey; Chandler, Kathryn; Broughman, Stephen P.
TITLE	Homeschooling in the United States: 1999.
INSTITUTION	National Center for Education Statistics (ED), Washington, DC.
REPORT NO	NCES-2001-033
PUB DATE	2001-07-00
NOTE	34p.
AVAILABLE FROM	ED Pubs, P.O. Box 1398, Jessup, MD 20794-1398. Tel: 877-433-7827 (Toll Free); Web site: http://nces.ed.gov/pubsearch/index.asp.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Comparative Analysis; *Elementary Secondary Education; Family School Relationship; *Home Schooling; National Surveys; Parent Attitudes; Parent Background; *Parents as Teachers; Statistical Surveys; Tables (Data)
IDENTIFIERS	National Household Education Survey; United States

ABSTRACT

The National Household Education Surveys Program (NHES), 1999, is a telephone survey data collection program conducted by the National Center for Education Statistics (NCES). Based on NCES data, this report provides an estimate of the number of home-schooled students in the United States, characteristics of home-schooled children and their families, parents' reasons for home-schooling, and public school support for home-schoolers. The findings are based on surveys conducted with parents/guardians of children ages 5 to 17 with a grade equivalent of kindergarten to grade 12. For the analyses reported in this document, data were obtained from 275 home-schooled students and 16,833 nonhome-schooled students. Among the major findings of this Parent-NHES are that an estimated 850,000 students nationwide were being schooled at home, 1.7 percent of U.S. students. A greater percentage of home-schoolers compared to nonhome-schoolers were white, non-Hispanic (75 percent compared to 65 percent). The household income of home-schoolers in 1999 was no different from that of nonhome-schoolers. Parents of home-schoolers had higher levels of educational attainment than parents of nonhome-schoolers. Parents gave a wide variety of reasons for home-schooling their children, including being able to give their child a better education at home, religious reasons, and a poor learning environment in school. Twenty-eight percent of home-schoolers' parents reported that public schools/districts offered them extracurricular activities, 21 percent reported receiving curriculum support, and 23 percent reported receiving books and materials. The report concludes with future research plans and information on the study's methodology and technical notes. (Contains 19 references.) (KB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

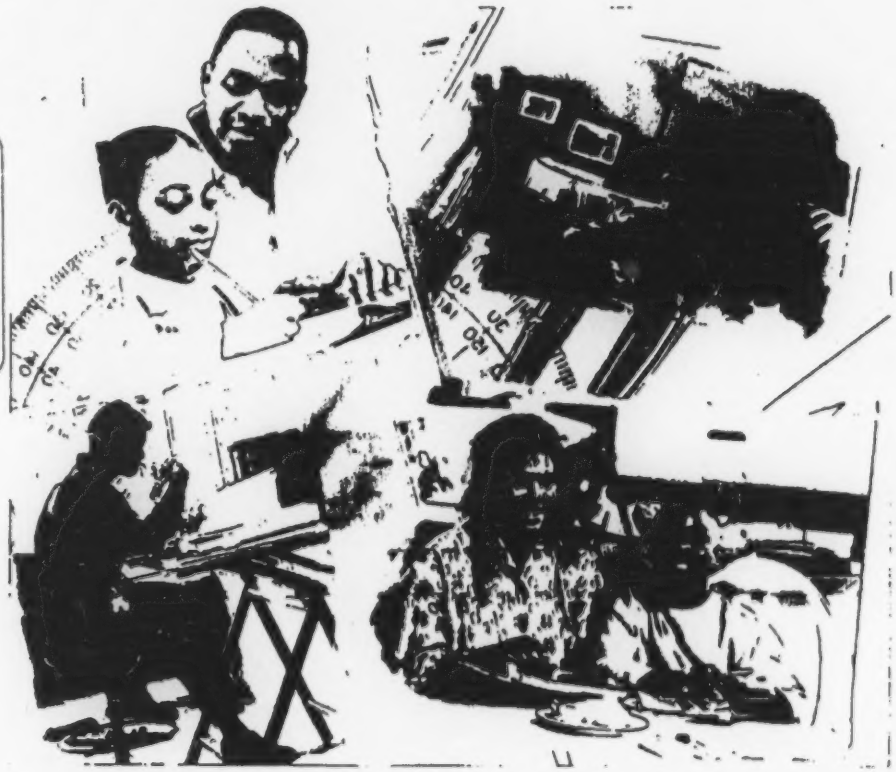
ED 455 926

Ps

NATIONAL CENTER FOR EDUCATION STATISTICS

Homeschooling in the United States: 1999

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



PS 029670

U.S. Department of Education
Office of Educational Research and Improvement NCES 2001-033

BEST COPY AVAILABLE

Customer Survey of OERI Publication Users

To help us improve future editions of this publication and give you better customer service, we would appreciate your comments on this survey form. Please check the appropriate box(es) below for each question. Responses will be kept completely confidential. You may return the survey by mail or FAX. It can be folded and taped closed to allow mailing to the address listed on the reverse side of this form, or it can be returned by FAX to 202–219–1321. **Many thanks for your customer feedback—it is very important to us!**

1a. Name of publication Homeschooling in the United...

1b. Publication number NCES 2001-033

1c. Author name Stacey Bielick

2. How did you receive a copy of this publication?

- ❑ Bought it
- ❑ Borrowed it
- ❑ Mailing list membership
- ❑ Telephone request
- ❑ Internet request
- ❑ Other (please describe)

3. Was this publication easy to get?

❑ Very ❑ Somewhat ❑ Not at all

4. How did you find out about this and other OERI publications? (Check all that apply.)

- ❑ Conferences
- ❑ Journal articles
- ❑ Teacher/educator
- ❑ Professional associations
- ❑ Internet (WWW)
- ❑ Publication announcement
- ❑ Received in mail
- ❑ OERI staff contact

5. For what purposes did you use this OERI publication? (Check all that apply.)

- ❑ Planning
- ❑ Policy or legislation
- ❑ Administrative decisions
- ❑ Teaching, class material
- ❑ Research/analysis
- ❑ General information
- ❑ Writing news articles, TV or radio material
- ❑ Marketing, sales, or promotion
- ❑ Other (please describe)

6. Did the publication help you accomplish whatever you needed it for?

❑ Yes ❑ No ❑ Partially

7. What is your occupation?

❑ Parent ❑ Teacher ❑ Administrator
❑ Librarian ❑ Researcher ❑ Statistician
❑ Journalist/writer ❑ Policy Analyst ❑ Student
❑ Program Planner
❑ Other (please specify)

8. How could this OERI publication (or other OERI publications) better meet your needs? (Check all that apply.)

- ❑ More important topics in education
- ❑ More timely release of data
- ❑ More text introductions to each section
- ❑ More research statistics
- ❑ Shorter reports (less than 10 pages)
- ❑ Other (please describe)

9. Overall, how satisfied are you with this product?	**Very Satisfied**	**Satisfied**	**Dissatisfied**
	❑	❑	❑
a. Comprehensiveness of information	❑	❑	❑
b. Clarity of writing (readability, interpretability)	❑	❑	❑
c. Clarity of presentation (e.g., tables, charts)	❑	❑	❑
d. Timeliness of information	❑	❑	❑
e. Accuracy of information	❑	❑	❑
f. Clarity of technical notes	❑	❑	❑
g. Usefulness of resources and bibliography	❑	❑	❑
h. Organization	❑	❑	❑
i. Length	❑	❑	❑
j. Format	❑	❑	❑

PAPERWORK BURDEN STATEMENT
Office of Education Research and Improvement (OERI)
Publication Customer Survey

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 1880-0529. The time required to complete this information collection is estimated to average 10 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s), suggestions for improving this form, or concerns regarding the status of your individual submission of this form, write directly to: P. Quinn, Room 204, Media and Information Services, OERI, U.S. Department of Education, 555 New Jersey Avenue NW, Washington, DC 20208-5570.

BEST COPY AVAILABLE

OERI Publication Customer Survey
Media and Information Services
U.S. Department of Education
Washington, DC 20202

Official Business
Penalty for Private Use, $300

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 012935 WASHINGTON DC

POSTAGE WILL BE PAID BY U.S. DEPARTMENT OF EDUCATION

U.S. Department of Education
Mail Code: 5570
400 Maryland Avenue, S.W.
Washington, D.C. 20277—2935

Fold on line—TAPE CLOSED—DO NOT STAPLE

10. Do you have any suggestions regarding the content or format of future editions of this publication or other comments?

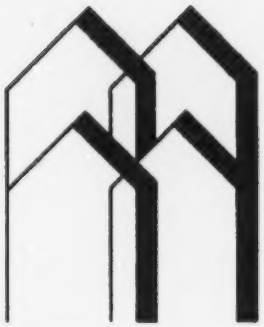
MIS 1999-6532

NATIONAL CENTER FOR EDUCATION STATISTICS

Statistical Analysis Report July 2001

National Household Education Surveys Program

Homeschooling in the United States: 1999



National
Household
Education
Surveys Program

Stacey Bielick
Kathryn Chandler
Stephen P. Broughman
National Center for Education Statistics

U.S. Department of Education
Office of Educational Research and Improvement NCES 2001–033

U.S. Department of Education
Rod Paige
Secretary

Office of Educational Research and Improvement
Grover J. Whitehurst
Assistant Secretary

National Center for Education Statistics
Gary W. Phillips
Acting Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics
Office of Educational Research and Improvement
U.S. Department of Education
1990 K Street, NW
Washington, DC 20006–5561

July 2001

The NCES World Wide Web Home Page is: ***http://nces.ed.gov***
The NCES World Wide Web Electronic Catalog is: ***http://nces.ed.gov/pubsearch/index.asp***

Suggested Citation

U.S. Department of Education, National Center for Education Statistics. *Homeschooling in the United States: 1999*, NCES 2001–033, by Stacey Bielick, Kathryn Chandler, and Stephen P. Broughman. Project Officer: Stephen P. Broughman. Washington, DC: 2001.

For ordering information on this report, write:

U.S. Department of Education
ED Pubs
P.O. Box 1398
Jessup, MD 20794–1398

or call toll free 1–877–4ED–Pubs.

Content Contact:
Stephen P. Broughman
(202) 502–7315
Stephen.Broughman@ed.gov

BEST COPY AVAILABLE

Acknowledgments

Many people contributed to the completion of this report. The authors wish to thank Sandra Eyster, Jennifer Sable, and Nikkita Taylor of the Education Statistics Services Institute (ESSI) for their research assistance, comments, and analysis suggestions on earlier drafts of this report. Mary McLaughlin of ESSI provided a thorough technical review of the report. At NCES, Karen O'Conor, Bill Hussar, Sheida White, and Frank Johnson reviewed the report and provided thoughtful feedback on the content and technical aspects of the report.

Several other reviewers helped shape the final report. These reviewers include: Joyce P. Johnson of the New Hampshire Department of Education; Jack Klenk of the U.S. Department of Education's Office of Non-Public Education; Patricia Lines, formerly of the U.S. Department of Education and Senior Fellow at Discovery Institute; and Brian Ray of the National Home Education Research Institute. A special thank you to Brian Ray and Patricia Lines for their pioneering efforts to document homeschooling families in the United States. Any remaining errors or problems in this report are the sole responsibility of the authors.

Highlights

The Parent Survey of the National Household Education Surveys Program, 1999 (Parent-NHES:1999) provides a comprehensive set of information that may be used to estimate the number and characteristics of homeschoolers in the United States. This report, *Homeschooling in the United States: 1999*, presents an estimate of the number of homeschooled students, characteristics of homeschooled children and their families, parents' reasons for homeschooling, and public school support for homeschoolers. Students were considered to be homeschooled if their parents reported them being schooled at home instead of a public or private school, if their enrollment in public or private schools did not exceed 25 hours a week, and if they were not being homeschooled solely because of a temporary illness.

Major findings from the Parent-NHES:1999 indicate:

- **In the spring of 1999, an estimated 850,000 students nationwide were being homeschooled.** This amounts to 1.7 percent of U.S. students, ages 5 to 17, with a grade equivalent of kindergarten through grade 12. Four out of five homeschoolers were homeschooled only (82 percent) and one out of five homeschoolers were enrolled in public or private schools part time (18 percent).

- **A greater percentage of homeschoolers compared to nonhomeschoolers were white, non-Hispanic in 1999—75 percent compared to 65 percent.** At the same time, a smaller percentage of homeschoolers were black, non-Hispanic students and a smaller percentage were Hispanic students.

- **The household income of homeschoolers in 1999 was no different than nonhomeschoolers.** However, parents of homeschoolers had higher levels of educational attainment than did parents of nonhomeschoolers.

- **Parents gave a wide variety of reasons for homeschooling their children.** These reasons included being able to give their child a better education at home, for religious reasons, and because of a poor learning environment at school.

Table of Contents

Acknowledgments iii

Highlights iv

Background 1

Estimated Number of Homeschooled Students in the United States 3

Characteristics of Homeschooled Students and Their Families 4

Parents' Reasons for Homeschooling 10

Public School Support for Homeschooled Students 12

Future Research Plans 14

Methodology and Technical Notes 15

References 22

List of Tables

Table 1.— Number and percentage of homeschooled students, ages 5-17, with a grade equivalent of kindergarten to grade 12, by school enrollment status: 1999 4

Table 2.— Number of students and number and percentage of homeschooled students, ages 5-17, with a grade equivalent of kindergarten to grade 12, by selected characteristics: 1999 5

Table 3.— Distribution of all students, homeschooled students, and nonhomeschooled students ages 5-17, with a grade equivalent of kindergarten to grade 12, by selected characteristics: 1999 7

Table 4.— Number and percentage of homeschooled students by reason for home-schooling: 1999 11

Table 5.— Percentage of homeschooled students whose parents reported support available from public schools or districts for homeschoolers and the percentage who also used them: 1999 13

List of Figures

Figure 1.— Point estimate and 95% confidence interval for number of homeschooled students, ages 5-17, with a grade equivalent of kindergarten to grade 12: 1999 3

Figure 2.— Ten reasons for homeschooling and the percentage of homeschooled students whose parents gave each reason: 1999 10

Background

Past estimates of the number of homeschoolers vary by hundreds of thousands of children. Brian Ray, president of the National Home Education Research Institute, estimated the number of homeschoolers to be around 1.15 million during the 1996–97 school year, and predicted that the number would grow to at least 1.3 million during 1999–2000 (Ray 1997). Patricia M. Lines, through her research at the U.S. Department of Education, National Institute on Student Achievement, Curriculum and Assessment, estimated the number of homeschoolers to be around 700,000 during 1995–96, possibly growing to 1 million by 1997–98 (Lines 1999). Both Ray and Lines grant that their estimates probably anchor the range within which the actual number of homeschoolers could fall.

The methods used by Ray and Lines in the development of their estimates varied. Ray derived his most recent estimate of the number of homeschoolers using his own 1995 survey of homeschoolers and their use of curricular packages as his base and sales of homeschooling curricular packages to adjust for growth over time. Ray applied the ratio of users of curricular packages and nonusers identified in the 1995 survey to more recent sales of homeschool curricular packages to obtain his 1999–2000 estimate. Lines collected data from all states that obtained records on homeschooling children in both the 1990–91 and 1995–96 school years (32 states and the District of Columbia). Using the 12 states with high record-collection rates for homeschoolers, based on Ray's estimates of the percentage of homeschoolers who reported filing in their state, Lines estimated the percentage of school-aged children who were homeschooling in those 12 states. Lines estimated the number of children homeschooled nationally by applying the percentage distribution of homeschoolers from the state sample to national totals of school-aged children.

The National Center for Education Statistics (NCES) was the first organization to attempt to estimate the number of homeschoolers in the United States using a rigorous sample survey of households. A household sampling frame circumvents problems inherent in the use of incomplete sample frames, such as customers of curricular providers and administrative records. Attempts to develop estimates of homeschoolers through household surveys, however, can also be problematic. The first two efforts to estimate homeschoolers at NCES—through the October supplement to the 1994 Current Population Survey (CPS:Oct94) and through the Parent and

---

1

Family Involvement in Education/Civic Involvement Survey of the National Household Education Surveys Program, 1996 (PFI/CI-NHES:1996)—produced very different estimates. One problem that may have contributed to the varying estimates was the difference in how the two surveys identified students who were both homeschooled and enrolled in school part-time. Neither survey collected precise data on these part-time homeschoolers. An NCES technical report, *Issues Related to Estimating the Home-Schooled Population in the United States with National Household Survey Data*, explores in detail the differences in survey design and execution that may have contributed to the disparity between the CPS:Oct94 and PFI-NHES:1996 estimates (Henke et al. 2000).

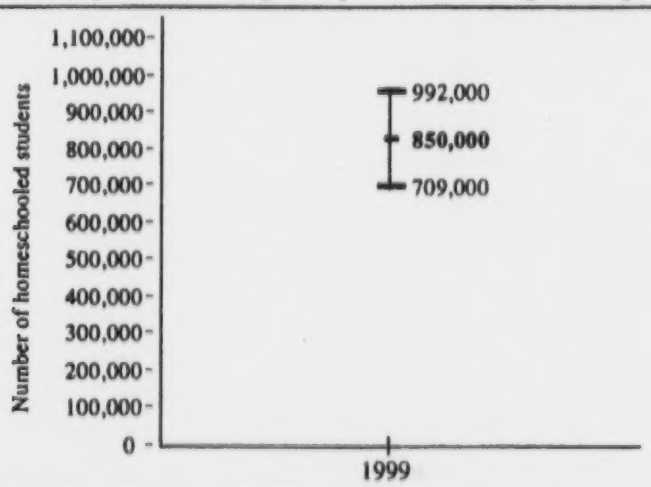
In this report, the Parent Survey of the National Household Education Surveys Program, 1999 (Parent-NHES:1999) is used to estimate the number of homeschoolers in the United States, to describe the characteristics of homeschoolers, to document parents' reasons for homeschooling, and parents' reports of public school support for homeschoolers. Students were considered to be homeschooled if their parents reported them being schooled at home instead of a public or private school, if their enrollment in public or private schools did not exceed 25 hours a week, and if they were not being homeschooled solely because of a temporary illness. The unweighted number of homeschooled students used in this analysis is 275 and the unweighted number of nonhomeschooled students is 16,833. Students are defined in this report as children ages 5 to 17 with a grade equivalent of kindergarten through grade 12.

Estimated Number of Homeschooled Students in the United States

Approximately 850,000 students were being homeschooled during the spring of 1999, according to data from the Parent Survey of the National Household Education Surveys Program, 1999 (Parent-NHES:1999) (see table 1). Homeschoolers accounted for 1.7 percent of students nationwide, ages 5 to 17, with a grade equivalent of kindergarten through grade 12. The estimate includes students who were homeschooled while also enrolled in school for 25 hours or less per week, and excludes students who were homeschooled due to a temporary illness.

As with all sample surveys, the numbers and percentages in this report are estimates of the numbers and percentages in the population. Although 850,000 is the best population estimate available from this sample survey, another similar sample survey might produce a different estimate. A 95 percent confidence interval defines a range of values such that 95 percent of the estimates from other similar surveys will fall within the range of values. The 95 percent confidence interval for the number of homeschoolers is 709,000 to 992,000. The estimate provided here—850,000—is the mid-point of the range. Figure 1 illustrates the confidence interval.

Figure 1.— Point estimate and 95% confidence interval for number of homeschooled students, ages 5-17, with a grade equivalent of kindergarten to grade 12: 1999



SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

Characteristics of Homeschooled Students and Their Families

Despite research limitations on documenting the number of homeschoolers, recent research on homeschooling helps suggest some characteristics of students and families who homeschool. An extensive 1998 study of homeschoolers, although based on a convenience sample, suggests that homeschoolers differ from the general population in parents' educational attainment, household income, parents' marital status, and family size (Rudner 1999).[1] Other research suggests that although homeschooling in the United States may have primarily been a trend within a homogeneous subgroup of white, middle-class, Christian families, growth in homeschooling may be reaching a broader range of American families and values (McDowell et al. 2000, Lines 2000a, Welner & Welner 1999).

The Parent-NHES:1999 provides descriptive data about the characteristics of homeschoolers in the United States and their families. This report includes students who were homeschooled only and students who were homeschooled and enrolled in school for 25 hours or less per week. As shown in table 1, about four out of five homeschoolers were homeschooled only (82 percent) and one out of five homeschoolers were enrolled in public or private schools part-time (18 percent).

Table 1.— Number and percentage of homeschooled students, ages 5-17, with a grade equivalent of kindergarten to grade 12, by school enrollment status: 1999

School enrollment status	Number of homeschooled students	Percent	s.e.
Total	**850,000**	**1.7**	**0.14**
Only homeschooled	697,000	82.0	2.94
Enrolled in school part-time	153,000	18.0	2.94
Enrolled in school for less than 9 hours a week	107,000	12.6	2.81
Enrolled in school for 9 to 25 hours a week	46,000	5.4	1.50

NOTE: s.e. is standard error. Excludes students who were enrolled in school for more than 25 hours and students who were homeschooled due to a temporary illness. Numbers may not add to total due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

[1] Rudner's study is based on a survey administered by Bob Jones University to a sample drawn from parents who used the university's standardized testing program (Welner & Welner 1999).

Table 2 shows the number of all students by selected characteristics, the number of homeschooled students by those same characteristics, and for each characteristic the percentage of students who are homeschooled. As shown in table 2, the percentage of students who were homeschooled in 1999 differed based on various characteristics of students and their families. Depending on these student and family characteristics, the percentage of homeschoolers among students ranged from 0.7 to 4.6 percent. Characteristics that distinguished high percentages of homeschooling were two-parent families, especially when only one parent participated in the labor force; large family size; and parents' high educational attainment. The percentage of students who were homeschooled was similar for both boys and girls; across elementary, middle, and high school grades; and across the four income ranges used in the analysis.

Table 2.— Number of students and number and percentage of homeschooled students, ages 5-17, with a grade equivalent of kindergarten to grade 12, by selected characteristics: 1999

Characteristic	Number of students	Number of homeschooled students	Percent	s.e.
Total	**50,188,000**	**850,000**	**1.7**	**0.14**
Grade equivalent[1]				
K–5	24,428,000	428,000	1.8	0.20
Kindergarten	3,790,000	92,000	2.4	0.52
Grades 1–3	12,692,000	199,000	1.6	0.29
Grades 4–5	7,946,000	136,000	1.7	0.28
Grades 6–8	11,788,000	186,000	1.6	0.24
Grades 9–12	13,954,000	235,000	1.7	0.24
Race/ethnicity				
White, non-Hispanic	32,474,000	640,000	2.0	0.19
Black, non-Hispanic	8,047,000	84,000	1.0	0.31
Hispanic	7,043,000	77,000	1.1	0.25
Other	2,623,000	49,000	1.9	0.65
Sex				
Female	24,673,000	434,000	1.8	0.19
Male	25,515,000	417,000	1.6	0.17
Number of children in the household				
One child	8,226,000	120,000	1.5	0.24
Two children	19,883,000	207,000	1.0	0.14
Three or more children	22,078,000	523,000	2.4	0.30
Number of parents in the household				
Two parents	33,007,000	683,000	2.1	0.21
One parent	15,454,000	142,000	0.9	0.16
Nonparental guardians	1,727,000	25,000	1.4	0.82
Parents' participation in the labor force				
Two parents–one in labor force	9,628,000	444,000	4.6	0.55
Two parents–both in labor force	22,880,000	237,000	1.0	0.17
One parent in labor force	13,907,000	98,000	0.7	0.16
No parent in labor force	3,773,000	71,000	1.9	0.48

See footnotes at end of table.

Table 2.— Number of students and number and percentage of homeschooled students, ages 5-17, with a grade equivalent of kindergarten to grade 12, by selected characteristics: 1999—continued

Characteristic	Number of students	Number of homeschooled students	Percent	s.e.
Household income				
$25,000 or less	16,776,000	262,000	1.6	0.27
25,001–50,000	15,220,000	278,000	1.8	0.24
50,001–75,000	8,576,000	162,000	1.9	0.30
75,001 or more	9,615,000	148,000	1.5	0.28
Parents' highest educational attainment				
High school diploma or less	18,334,000	160,000	0.9	0.15
Voc/tech degree or some college	15,177,000	287,000	1.9	0.25
Bachelor's degree	8,269,000	213,000	2.6	0.42
Graduate/professional school	8,407,000	190,000	2.3	0.46
Urbanicity[2]				
City	31,178,000	455,000	1.5	0.16
Town	6,237,000	120,000	1.9	0.39
Rural	12,773,000	275,000	2.2	0.31

[1] Students whose grade equivalent was "ungraded" were excluded from the grade analysis.

[2] Urbanicity is based on a U.S. Census classification of places as urban or rural. City is a place that is urban, inside urban area; town is a place that is urban, outside urban area; rural is a place not classifed as urban.

NOTE: s.e. is standard error. Numbers may not add to total due to rounding. Number and percent of homeschoolers excludes students who were enrolled in school for more than 25 hours and students who were homeschooled due to a temporary illness.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

Table 3 further explores the characteristics that distinguish homeschoolers by comparing the characteristics of homeschoolers to those of all students and to the characteristics of nonhomeschoolers. The similarities and differences between homeschoolers and nonhomeschoolers are discussed in detail below.

Grade equivalent of homeschooled students

Homeschoolers distribute over the grade groupings in much the same way as nonhomeschoolers (see table 3). While it may appear that a higher percentage of homeschoolers were in kindergarten compared to nonhomeschoolers, the difference was not statistically significant.

Students' race/ethnicity and sex

A greater percentage of homeschoolers compared to nonhomeschoolers were white, non-Hispanic—75 percent compared to 65 percent. At the same time, a smaller percentage of homeschoolers were black, non-Hispanic students and a smaller percentage were Hispanic students. Girls and boys were equally represented among homeschoolers and nonhomeschoolers.

Table 3.— Distribution of all students, homeschooled students, and nonhomeschooled students ages 5-17, with a grade equivalent of kindergarten to grade 12, by selected characteristics: 1999

Characteristic	Number of students	All students		Homeschoolers[1]		Non-homeschoolers	
		Percent	s.e.	Percent	s.e.	Percent	s.e.
Total	**50,188,000**	**100.0**		**100.0**		**100.0**	
Grade equivalent[2]							
K–5	24,428,000	48.7	0.07	50.4	3.75	48.7	0.09
Kindergarten	3,790,000	7.6	0.04	10.8	2.31	7.5	0.05
Grades 1–3	12,692,000	25.3	0.04	23.5	3.61	25.3	0.07
Grades 4–5	7,946,000	15.8	0.02	16.0	2.34	15.8	0.05
Grades 6–8	11,788,000	23.5	0.04	21.9	2.83	23.5	0.06
Grades 9–12	13,954,000	27.8	0.10	27.7	3.21	27.8	0.11
Race/ethnicity							
White, non-Hispanic	32,474,000	64.7	0.32	75.3	3.36	64.5	0.33
Black, non-Hispanic	8,047,000	16.0	0.20	9.9	2.80	16.1	0.21
Hispanic	7,043,000	14.0	0.17	9.1	2.06	14.1	0.17
Other	2,623,000	5.2	0.23	5.8	2.01	5.2	0.23
Sex							
Female	24,673,000	49.2	0.47	51.0	3.27	49.1	0.47
Male	25,515,000	50.8	0.47	49.0	3.27	50.9	0.47
Number of children in the household							
One child	8,226,000	16.4	0.30	14.1	2.53	16.4	0.30
Two children	19,883,000	39.6	0.42	24.4	3.06	39.9	0.42
Three or more children	22,078,000	44.0	0.48	61.6	3.97	43.7	0.49
Number of parents in the household							
Two parents	33,007,000	65.8	0.41	80.4	3.26	65.5	0.42
One parent	15,454,000	30.8	0.41	16.7	2.91	31.0	0.42
Nonparental guardians	1,727,000	3.4	0.17	2.9	1.70	3.5	0.17
Parents' participation in the labor force							
Two parents–one in labor force	9,628,000	19.2	0.39	52.2	4.27	18.6	0.39
Two parents–both in labor force	22,880,000	45.6	0.48	27.9	3.92	45.9	0.48
One parent in labor force	13,907,000	27.7	0.44	11.6	2.53	28.0	0.44
No parent in labor force	3,773,000	7.5	0.32	8.3	2.21	7.5	0.32
Household income							
$25,000 or less	16,776,000	33.4	0.22	30.9	4.31	33.5	0.22
25,001–50,000	15,220,000	30.3	0.47	32.7	4.00	30.3	0.47
50,001–75,000	8,576,000	17.1	0.38	19.1	2.62	17.1	0.38
75,001 or more	9,615,000	19.2	0.42	17.4	2.65	19.2	0.42
Parents' highest education level							
High school diploma or less	18,334,000	36.5	0.43	18.9	2.88	36.8	0.43
Voc/tech degree or some college	15,177,000	30.2	0.43	33.7	3.85	30.2	0.44
Bachelor's degree	8,269,000	16.5	0.36	25.1	3.49	16.3	0.35
Graduate/professional school	8,407,000	16.8	0.41	22.3	4.17	16.7	0.40
Urbanicity[3]							
City	31,178,000	62.1	0.36	53.5	4.13	62.3	0.36
Town	6,237,000	12.4	0.34	14.2	2.59	12.4	0.35
Rural	12,773,000	25.5	0.23	32.4	3.81	25.3	0.23

[1] Excludes students who were enrolled in school for more than 25 hours and students who were homeschooled due to a temporary illness.

[2] Students whose grade equivalent was "ungraded" were excluded from the grade analysis.

[3] Urbanicity is based on a U.S. Census classification of places as urban or rural. City is a place that is urban, inside urban area; town is a place that is urban, outside urban area; rural is a place not classifed as urban.

NOTE: s.e. is standard error. Numbers may not add to total due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

Number of children living in the household

A much greater percentage of homeschoolers than nonhomeschoolers came from families with three or more children—62 percent of homeschooled students were part of families with three or more children compared to 44 percent of nonhomeschoolers. Homeschoolers were just as likely to be an only child as nonhomeschoolers and were less likely than nonhomeschoolers to have just one sibling.

Number of parents living in the household and labor force participation

In order to homeschool, parents may need to dedicate a significant amount of time to schooling their children. Because of the time required, homeschooling usually involves two parents—one who participates in the labor force and one who homeschools. Rudner (1999) found that 97 percent of homeschooling parents were married couples. The Parent-NHES:1999 shows the percentage of homeschooled students living in two-parent households was much higher than the percentage for nonhomeschoolers—80 percent of homeschooled students lived in two-parent families compared to 66 percent for nonhomeschoolers. In addition, 52 percent of homeschoolers came from two-parent families where only one parent was participating in the labor force compared to 19 percent for nonhomeschoolers.

Household income

Although Rudner found that the median household income of homeschooling families was higher than the median household income of families with children nationwide, the Parent-NHES:1999 indicates that the household income of homeschoolers, reported in ranges from less than $25,000 to over $75,000, is the same as the household income of nonhomeschoolers. The same percentage of homeschooled and nonhomeschooled students lived in households with annual incomes of $50,000 or less (64 percent).[2]

[2] An additional analysis of household income in two-parent families where only one parent was participating in the labor force also shows no difference between homeschoolers and nonhomeschoolers (data not shown in tables).

Parents' highest educational attainment

Parents' highest educational attainment, however, was clearly associated with homeschooling. Parents of homeschoolers had higher levels of educational attainment than did parents of nonhomeschoolers. Table 3 shows that 37 percent of parents of nonhomeschoolers did not complete any schooling beyond high school compared to 19 percent of parents of homeschoolers. Conversely, 25 percent of parents of homeschoolers attained bachelor's degrees as their highest degree, compared to 16 percent of parents of nonhomeschoolers.

Urbanicity

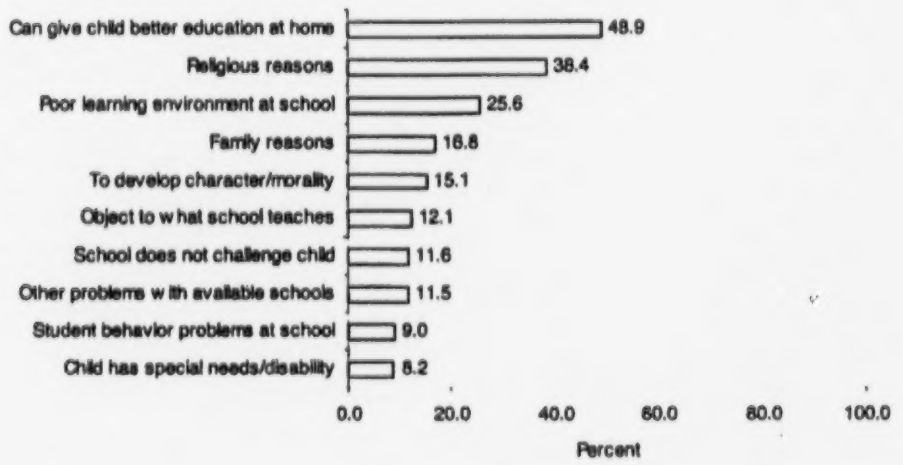
Urbanicity refers to the classification of households as urban or rural. There are two classifications of urban that are referred to in this report as cities and towns. Places not classified as urban are rural. The percentage of homeschoolers living in a city was about 9 percentage points lower than the percentage for nonhomeschoolers (53 and 62 percent, respectively). There were no statistically significant differences between the percentages of homeschoolers and nonhomeschoolers living in towns or rural areas. For more information on urbanicity, see the *Methodology and Technical Notes* section of this report.

Parents' Reasons for Homeschooling

Parents may homeschool their children for a number of reasons. Previous studies suggest that the most common reasons that parents give for homeschooling their children are moral or religious reasons, a desire for high educational achievement, dissatisfaction with public schools' instructional program, and concerns about school environment, including safety, drugs, and peer pressure (Lines 2000a, Grubb 1998, Mayberry 1991).

Parents gave a wide range of reasons for homeschooling in the Parent-NHES:1999.[3] Parents were asked to list their reasons for homeschooling and could provide as many reasons as applied. The reasons parents gave were coded into 16 categories and included better education, religious reasons, and poor school environment. Figure 2 shows 10 reasons cited by at least 5 percent of students' parents. Additional reasons are listed in table 4.

Figure 2.— Ten reasons for homeschooling and the percentage of homeschooled students whose parents gave each reason: 1999



NOTE: Percentages do not add to 100 percent because respondents could give more than one reason.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999

[3] The unit of analysis in the Parent-NHES:1999 is the student, not the parent. In each household, up to two children may have been sampled for the survey. In the Parent-NHES:1999, there were 30 households in which parents completed interviews about two homeschooled children. In 16 of those cases, the parents gave the exact same reasons for homeschooling for both children.

Table 4.— Number and percentage of homeschooled students by reason for homeschooling: 1999

Reasons for homeschooling	Number of homeschooled students	Percent	s.e.
Can give child better education at home	415,000	48.9	3.79
Religious reasons	327,000	38.4	4.44
Poor learning environment at school	218,000	25.6	3.44
Family reasons	143,000	16.8	2.79
To develop character/morality	128,000	15.1	3.39
Object to what school teaches	103,000	12.1	2.11
School does not challenge child	98,000	11.6	2.39
Other problems with available schools	98,000	11.5	2.20
Student behavior problems at school	76,000	9.0	2.40
Child has special needs/disability	69,000	8.2	1.89
Transportation/convenience	23,000	2.7	1.48
Child not old enough to enter school	15,000	1.8	1.13
Want private school but cannot afford it	15,000	1.7	0.77
Parent's career	12,000	1.5	0.80
Could not get into desired school	12,000	1.5	0.99
Other reasons*	189,000	22.2	2.90

*Parents homeschool their children for many reasons that are often unique to their family situation. Some of the "other reasons" parents gave for homeschooling in the Parent-NHES:1999 were: It was the child's choice; to allow parents more control over what their children were learning; flexibility; and parents wanted year-round schooling.

NOTE: s.e. is standard error. Excludes students who were enrolled in school for more than 25 hours and students who were homeschooled due to a temporary illness. Percents do not add to 100 percent because respondents could choose more than one reason.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

Public School Support for Homeschooled Students

Public schools or school districts sometimes offer support for homeschoolers by providing parents with a curriculum, books and materials, places to meet, and the opportunity for homeschooled children to attend classes and participate in extracurricular activities at the school. Previous research found only a small percentage of homeschoolers enrolled in classes, used textbooks, or used libraries when they were made available by public schools and that many homeschoolers express antipathy toward using public school support (Lines 2000b, Yeager 1999, Mayberry et al. 1995).

Table 5 shows the different types of public school support for homeschoolers asked about in the Parent-NHES:1999. Parents of homeschoolers were asked whether their child's assigned school or district offered any of the nine pre-specified types of support shown in table 5. The estimates are based on parents' reports of public school support and use, not what schools or districts may actually offer. Between 15 and 38 percent of homeschoolers' parents did not know whether various types of support were offered.

The first two columns of estimates in table 5 show that, altogether, 28 percent of homeschoolers' parents reported that public schools or districts offered extracurricular activities, 21 percent reported curriculum support, and 23 percent reported books and materials. Between about 3 and 11 percent of homeschoolers' parents said that support was available and that they used the support, and between about 5 and 22 percent said that the support was available but they did not use it. For example, as table 5 shows, about 6 percent of homeschoolers' parents reported the chance to attend extracurricular activities and used the support, and 11 percent reported that schools offered books and materials and that they had used this type of public school support.

Table 5.— Percentage of homeschooled students whose parents reported support available from public schools or districts for homeschoolers and the percentage who also used them: 1999

Type of support	Available and not used		Available and used		Not available		Don't know if available	
	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
Curriculum	12.4	2.35	8.1	2.20	49.0	3.55	30.5	3.79
Books/materials	12.2	2.22	10.6	2.47	50.0	3.92	27.3	3.95
Place for parents to meet or get information	8.9	1.77	6.4	1.57	63.5	3.57	21.2	2.97
Web site for parents	#	#	#	#	53.7	4.84	37.5	4.75
Place for students to meet	4.7	1.26	7.0	1.66	69.0	3.29	19.3	2.77
Web site for students	#	#	#	#	60.2	4.30	34.5	4.21
Extracurricular activities	21.5	2.85	6.4	1.90	56.4	3.99	15.8	2.95
Chance to attend some classes*	16.5	2.91	2.8	1.32	49.4	4.09	31.3	4.10

*Data not available for students who attended private schools part-time and for students who attended public schools for less than 9 hours. Estimates are based on the number of full-time homeschoolers reporting and the number of students "using" public schools for 9 to 25 hours.

#Too few cases for a reliable estimate.

NOTE: s.e. is standard error. Excludes students who were enrolled in school for more than 25 hours and students who were homeschooled due to a temporary illness.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Parent Survey of the National Household Education Surveys Program, 1999.

BEST COPY AVAILABLE

Future Research Plans

NCES plans to collect and report data about homeschoolers with future Parent and Family Involvement in Education Surveys (PFI), slated to occur on a 4-year cycle next scheduled for 2003 as part of the National Household Education Surveys Program (NHES). Future Parent and Family Involvement in Education Surveys will provide a comprehensive set of information that may be used to estimate the number and characteristics of homeschoolers in the United States. Future areas of inquiry might also include items on homeschoolers' use of distance learning and the Internet, information about families' past use of homeschooling, more information about homeschoolers who attend school for some classes or subjects, and specific information about homeschoolers' plans for postsecondary education.

Methodology and Technical Notes

The National Household Education Surveys Program (NHES) is a telephone survey data collection program conducted by the U.S. Department of Education's National Center for Education Statistics (NCES). Data collections have taken place from January through early May in 1991 and January through April in 1993, 1995, 1996, and 1999. When appropriately weighted, each sample is nationally representative of all civilian, non-institutionalized persons in the 50 states and District of Columbia. The samples were selected using random-digit-dialing (RDD) methods, and the data were collected using computer-assisted telephone interviewing (CATI) technology.

Data from the 1999 administration of the NHES were used in this report. A screening interview administered to a member of the household age 18 or older was used to determine whether any children of the appropriate age lived in the household, to collect information on each child, and to identify the appropriate parent or guardian to respond for the sampled child. If one or two eligible children resided in the household, a parent interview was conducted about each child. If more than two eligible children resided in the household, generally two were sampled for extended interviews. Each interview was conducted with the parent or guardian most knowledgeable about the care and education of each sampled child, that parent or guardian being the child's mother in 77 percent of the cases. This report is based on a subset of the total sample, specifically children ages 5 to 17 with a grade equivalent of kindergarten to grade 12. The unweighted number of homeschooled students used in this analysis is 275 and the unweighted number of nonhomeschooled students is 16,833.

Response Rates

Screening interviews, administered to all households, were completed with 57,278 households in 1999—yielding a response rate of 74 percent of all households called. During the screener, children were identified and sampled for the parent interview. Parent interviews were completed for 88 percent of the sampled children. The response rate for the entire sample in the Parent-NHES:1999 is calculated by taking the product of the proportion of completed screeners and the proportion of completed parent interviews for sampled children which, overall, totals to 65 percent (.74*.88=.65).

The parent interview completion rate for sampled children reported by the screener respondent to be homeschooled was 85 percent, which yields an estimated response rate for this group of 63 percent. The parent interview completion rate for sampled children reported by the screener respondent to be nonhomeschooled children was 88 percent which yields an estimated response rate for this group of 65 percent. For an explanation of response rates and a detailed analysis of possible biases in the Parent-NHES:1999, see the *National Household Education Survey of 1999: Methodology Report* (Nolin et al. 2000).

Item nonresponse (the failure to complete some items in an otherwise completed interview) was very low. The item nonresponse rates for most variables in this report were less than 2 percent, except for 11 percent for household income. All items with missing responses (i.e., don't know, refused, or not ascertained) were imputed using an imputation method called a hot-deck procedure (Kalton and Kasprzyk 1986). As a result, no missing values remain in the data. Although "don't know" responses were imputed, the data contain imputation flags which were used to identify those who said "don't know" to the item about public school or district support for homeschoolers. For more information on the imputation procedures used in the Parent-NHES:1999, see the *National Household Education Survey of 1999: Methodology Report* (Nolin et al. 2000).

Data Reliability

NHES estimates are subject to two types of errors, sampling and nonsampling errors. Nonsampling errors are errors made in the collection and processing of data. Sampling errors occur because the data are collected from a sample rather than a census of the population.

Nonsampling Errors

Nonsampling error is the term used to describe variations in the estimates that may be caused by population coverage limitations and data collection, processing, and reporting procedures. The sources of nonsampling errors are typically problems like unit and item nonresponse, the differences in respondents' interpretations of the meaning of the questions, response differences related to the particular time the survey was conducted, the tendency for respondents to give socially desirable responses, and mistakes in data preparation.

In general, it is difficult to identify and estimate either the amount of nonsampling error or the bias caused by this error. For each NHES survey, efforts were made to prevent such errors from occurring and to compensate for them where possible. For instance, during the survey design

phase, cognitive interviews were conducted to assess respondents' knowledge of the topics, comprehension of questions and terms, and the sensitivity of items. The design phase also entailed extensive staff testing of the CATI instrument and a pretest in which several hundred interviews were conducted.

An important nonsampling error for a telephone survey is failure to include persons who do not live in households with telephones. Weighting adjustments using characteristics related to telephone coverage were used to reduce the bias in the estimates associated with children who do not live in households with telephones. In addition to accounting for nontelephone households, nonresponse, and oversampling of black and Hispanic households, characteristics used to obtain person level weights in the Parent-NHES:1999 include a cross between race/ethnicity of the child and household income categories, a cross of Census region and urbanicity, and a cross of home tenure and age or grade of child.

Sampling Errors

The sample of households with telephones selected for each NHES survey is just one of many possible samples that could have been selected from all households with telephones. Therefore, estimates produced from each NHES survey may differ from estimates that would have been produced from other samples. This type of variability is called sampling error because it arises from using a sample of households with telephones rather than all households with telephones.

The standard error is a measure of the variability due to sampling when estimating a statistic; standard errors for estimates presented in this report were computed using a jackknife replication method. Standard errors can be used as a measure of the precision expected from a particular sample. The probability that a complete census count would differ from the sample estimate by less than 1 standard error is about 68 percent. The chance that the difference would be less than 1.65 standard errors is about 90 percent; and that the difference would be less than 1.96 standard errors, about 95 percent.

Standard errors for all of the estimates are presented in the tables. These standard errors can be used to produce confidence intervals. For example, an estimated 1.7 percent of students were homeschooled in 1999. This percentage has an estimated standard error of 0.14 percent. Therefore, the estimated 95 percent confidence interval for this statistic is 1.42 to 1.97 percent. That is, in 95 out of 100 samples using the same sample design, the estimated participation rate rounded to the nearest tenth, should fall between 1.4 and 2.0 percent.

Statistical Tests

The tests of significance used in this analysis are based on Student's *t* statistics. As the number of comparisons at the same significance level increases, it becomes more likely that at least one of the estimated differences will be significant merely by chance, that is, will be erroneously identified as different from zero. Even when there is no statistical difference between the means or percentages being compared, there is a 5 percent chance of getting a significant *t* value of 1.96 from sampling error alone. As the number of comparisons increases, the chance of making this type of error also increases.

In order to correct significance tests for multiple comparisons, a Bonferroni adjustment was used. This method adjusts the significance level for the total number of comparisons made with a particular classification variable. All the differences cited in this report are significant at the 0.05 level of significance after a Bonferroni adjustment.

Definitions of Variables

Many of the variables used in the analysis for this report were derived from other variables in the Parent-NHES:1999. In most cases, variables that had more than four response categories were collapsed into four or fewer categories to accommodate the small number of sampled homeschoolers. This procedure of collapsing response categories ensured that the number of sampled homeschoolers was appropriate for statistical analysis.

Homeschooling

Although advocates and researchers address the variations in homeschooling, there is no consensus about what is or is not homeschooling (HomeSchool Association of California 2001, Lines 2000b, Mayberry et al. 1995). Homeschooling could be defined within the context of the grassroots home education movement—the parents, families, and advocates who have given rise to homeschooling as an education alternative—or it could be defined within a legal context, that is the laws and requirements that govern homeschooling from state to state. However, even a cursory review of homeschooling web sites and state requirements reveals that there is little consensus within grassroots networks or state agencies about the definition of homeschooling. Researchers, then, are faced with the difficult task of operationalizing a loosely defined concept for a hard-to-reach homeschool population.

Preiss (1989) defines homeschooling as "the educational alternative in which parents/guardians assume the primary responsibility for the education of their children." Other concepts that helped pioneer homeschooling emphasized child-led learning (Holt 1976) and teaching guided by religion (Lines 2000a, Mayberry 1995). There is also debate over part-time and full-time homeschooling (HomeSchool Association of California 2001, Lines 2000b). However, little work has been done to operationalize the concept of homeschooling in homeschool research largely because selective sampling frames already reduce researchers' ability to generalize much of their data (Archer 1999). For example, surveys analyzed by both Rudner (1999) and Ray (1995) are limited to voluntary users of services or members of specific organizations. Neither Rudner nor Ray appears to have applied additional definitional criteria. Lines (1999) used state administrative records, limiting her population of homeschooling to parents who register with state agencies. Lines does, however, define homeschoolers as "families who self-identify as homeschoolers, even if they utilize part-time school enrollment."

Homeschooling is defined in this report as students whose parents reported them being schooled at home instead of a public or private school and if their enrollment in a public or private school did not exceed 25 hours a week, and if they were not being homeschooled solely because of a temporary illness. The construction of this measure combines answers from the questions in the Parent-NHES:1999 listed below. The definition of homeschooling used in this report was intended to include rather than exclude students based on the data available to identify homeschooled students in the Parent-NHES:1999. Researchers wishing to apply different criteria to define homeschooled students may produce different results.

PB2. Some parents decide to educate their children at home rather than send them to school. Is (CHILD) being schooled at home?
Yes (GO TO PB3A)
No

PB3A. Is (CHILD) getting all of (his/her) instruction at home, or is (he/she) getting some at school and some at home?
All at home
Some at school & some at home (GO TO PB3B)

PB3B. How many hours each week does (CHILD) usually go to a school for instruction? Please do not include time spent in extracurricular activities.
Hours: ____

PC4. Next, I have a few questions about homeschooling. What are the main reasons you decided to school (CHILD) at home?

If parents' main reason for homeschooling was due to a temporary illness and for no other reason, that child was not considered to be homeschooled.

Grade equivalent

A student's grade equivalent is either the actual grade the student was enrolled in or the student's grade equivalent if she or he was not enrolled in school. One measure of grade equivalent used in the report had three categories: kindergarten to grade 5, grades 6 to 8, and grades 9 to 12. Another measure had five categories: kindergarten, grades 1 to 3, grades 4 to 5, grades 6 to 8, and grades 9 to 12.

Number of children in the household

The number of children in the household was derived by adding the sampled child (one) to the total number of siblings in the household. This report collapsed the number of children into three categories: One child—meaning the sampled child had no siblings; two children—meaning the sampled child had one sibling; and three or more children—meaning the sampled child had two or more siblings.

Number of parents in the household

Parents include birth, adoptive, step or foster parents in the household. If two such parents were in the household, the number of parents living in the household was two. If one such parent was in the household, the number of parents living in the household was one. If no such parents were in the household, the number of parents was none and the adult(s) responsible for the sampled child are referred to as nonparental guardians.

Parents' participation in the labor force

Parents include birth, adoptive, step or foster parents in the household or male or female guardians in the household. Parents were considered to be in the labor force if they were working full-time (35 hours or more per week) or part-time (less than 35 hours per week) or if they were actively looking for work during the time of the interview. If parents did not meet these criteria, they were classified as not in the labor force.

Household income

Household income is reported as a range in the Parent-NHES:1999. These ranges were collapsed into the following four categories for this report.

$25,000 or less
$25,001 to 50,000
$50,001 to 75,000
$75,001 or more

Parents' highest educational attainment

Parents' highest educational attainment is a composite variable that indicates the highest level of education for the students' parents (birth, adoptive, or step) or nonparent guardians who reside in the household. As stated earlier, we collapsed most variables into four or fewer categories to accommodate the small number of homeschoolers used in the analysis. Therefore, we collapsed the parent education variable from its original five categories to four categories by combining the two lowest categories into one category. The variable used in this report combines parents whose highest education is less than a high school diploma or equivalent with parents whose highest education is a high school diploma or its equivalent.

Urbanicity

This variable categorizes the household ZIP Code as urban or rural. The definitions for these categories are taken directly from the 1990 Census of Population. An urban area comprises a place and the adjacent densely settled surrounding territory that together have a minimum population of 50,000 people. Thus, the first category of urbanicity consists of households *inside* an urban area, referred to in this report as a city. The second category, urban, *outside* urban area includes places outside of an urban area with a minimum population of 2,500 people, referred to in this report as a town. Places not classified as a city or town are rural.

References

Archer, J. (1999). Unexplored Territory. *Education Week*. Vol. XIX. No. 15, (December 8): 22-25.

Grubb, D. (1998). *Homeschooling: Who and Why?* Paper presented at the 27th annual meeting of the Mid-South Educational Research Association (New Orleans, LA, November 3-6).

Henke, R. R., Kaufman, P. Broughman, S. P., and Chandler, K. (2000). *Issues Related to Estimating the Home-Schooled Population in the United States With National Household Survey Data* (NCES 2000–311). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Holt, J. (1976). *Instead of Education : Ways to Help People Do Things Better*. New York: Dutton.

Home Education Magazine. (2001). *Frequently Asked Questions About Homeschooling* [on-line]. Available: http://www.home-ed-magazine.com/INF/STRT/strt_faq.html

HomeSchool Association of California. (2001). *Homeschooling Questions & Answers* [on-line]. Available: http://www.hsc.org/faqofficials.html

Kalton, G. and Kasprzyk, D. (1986). The Treatment of Missing Data. *Survey Methodology*, 12, 1-16.

Lines, P. (2000a). Homeschooling Comes of Age. *The Public Interest*. No. 140, (Summer): 74-85.

Lines, P. (2000b). When Home Schoolers Go to School: A Partnership Between Families and Schools. *Peabody Journal of Education*. Vol. 75, No.1/2: 159-86.

Lines, P. (1999). *Homeschoolers: Estimating Numbers and Growth*. Web edition. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement [on-line]. Available: http://www.ed.gov/offices/OERI/SAI/homeschool/ homeschoolers.pdf

Mayberry, M., Knowles, J. G., Ray, B., and Marlow, S. (1995). *Homeschooling: Parents as Educators*. Thousand Oaks, CA: Corwin Press, Inc.

Mayberry, M. (1991). *Conflict and Social Determinism: The Reprivatization of Education*: Paper presented at the American Educational Research Association meeting (Chicago, IL, April 3-7).

McDowell, S. A., Sanchez, A. R., and Jones, S. S. (2000). Participation and Perception: Looking at Home Schooling Through a Multicultural Lens. *Peabody Journal of Education*. Vol. 75, No.1/2: 124-46.

Nolin, M. J., Montaquila, J., Nicchitta, P., Kim, K., Kleiner, B., Lennon, J., Chapman, C., Creighton, S., and Bielick, S. (2000). *National Household Education Survey of 1999: Methodology Report* (NCES 2000-078). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Preiss, J. (1989) *Home Schooling: What's That?* Paper presented at the Mid-South Educational Research Association meeting (Little Rock, AR, November 8-10).

Ray, B. (1997). *Strengths of Their Own: Home Schoolers Across America*. Salem, OR: National Home Education Research Institute Publications.

Rudner, L. (1999). Scholastic Achievement and Demographic Characteristics of Home School Students in 1998. *Education Policy Analysis Archives*, Vol. 7, No. 8., March 23, 1999 [on-line]. Available: http://epaa.asu.edu/epaa/v7n8/

Welner, K. M., and Welner, K. G. (1999). Contextualizing Homeschooling Data: A Response to Rudner. *Education Policy Analysis Archives*, Vol.7, No. 13., April 11, 1999 [on-line]. Available: http://epaa.asu.edu/epaa/v7n13.html

Yeager, E. T. (1999). *A Study of Cooperation Between Home Schools and Public and Private Schools, K-12*. Unpublished doctoral dissertation, Texas A&M University–Commerce.

United States
Department of Education
ED Pubs
8242—B Sandy Court
Jessup, MD 20794—1398

Official Business
Penalty for Private Use, $300

Postage and Fees Paid
U.S. Department of Education
Permit No. G—17

FIRST-CLASS MAIL

EP:82909
ERIC PROCESSING & REFERENCE FACILITY
4483A FORBES BLVD
LANHAM MD 20706-4354

BEST COPY AVAILABLE